



Real # 805

Zhodzishskiy, MT

ZHODZISKIY, M.I.

Applicability limits of the approximation of the characteristic of
a tube using incomplete third-order polynomials. Radiotekh. i
elektron. 8 no.12:2089-2093 D '63. (MIRA 16:12)

ZHODZISHSKIY, M.I.

Contribution to the theory of the approximation of electron tube characteristics with large voltage amplitudes. Izv. vys. ucheb. zav.; radiotekh. 6 no.3:304-307 My-Je '63. (MIRA 16:9)

1. Rekomendovano Moskovskim ordena Lenina aviatsionnym institutom imeni Sergo Ordzhonikidze.

(Electron tubes)

ZHOGA, M., inzh.

Device for testing speedometers. Avt. transp. 43 no.8:24 Ag '65.
(MIRA 18:9)

ZHOGA, N.A.; KIRICHINSKIY, B.R.

Luminescence of dogs' urine in radiation sickness. Vrach. delo no.9:
126-127 S '60. (MIRA 13:9)

1. Laboratoriya biofiziki (rukovoditel' - chlen-korrespondent AN
USSR, prof. A.A. Gorodetskiy) Instituta fiziologii im. akad. A.A.
Bogomol'tsa AN USSR.

(URINE—ANALYSIS AND PATHOLOGY)
(RADIATION SICKNESS)

ZHOGA, N. A.

"The Effect of X-Ray Irradiation of the Central Nervous System on the Growth and Distribution of Experimental Cancer in Rabbits" Vrachebnoye Delo, No 6, 1953, pp 483-486.

In experiments with 93 rabbits it was determined that irradiation of the cerebrum, prior to injecting suspensions of cancer tissue into the animals, accelerated metastatic processes, the acceleration being approximately proportionate to the amount of irradiation. (RZhBiol, No 1, 1954)
SO: Sum. No. 443, 5 Apr. 55

ZHOGA N.A.

"The Influence of various kinds of Ionizing Radiation on the Skin, and the general Conditions of Experimental Animals" p. 160, in the book Experience in the Use of Radioactive Isotopes in Medicine R. Ye. KAVETSKIY and I.T. SHEVCHENKO, publishing House of the UKRAINIAN SSR, KIEV 1955, represents medical transactions of a conference held in KIEV from 18-20 January 1954.

So: 1100235

~~Brain and~~
ZHOGA, N. A. Cand Med Sci -- (diss) "Effect of ~~gamma~~ radiation
~~of the brain and the whole body~~ ^{with X-Rays} upon the resistance of the
body to the tumorous process." Kiev, 1957. 11 pp 19 cm. (Depart-
ment of Biol Sci Acad Sci UkSSR. Inst of Physiology im A. A.
Bogomolets). (KL, 23-57, 116)

-126-
118

ZHOVA, N. A.

CHEBOTAREV, Ye.Ye. (Kiyev, ul. Saksaganskogo, d. 74, kv.6); KORENEVSKIY, L.I.;
LEVCHUK, G.A.; ZHOVA, N.A.

Role of ovarian function exclusion in the compound treatment of
breast cancer. Nov.khir.arkh. no.3:14-18 My-Je '57. (MLRA 10:8)

1. Otdel eksperimental'noy i klinicheskoy khirurgii (zav. - chlen-
korrespondent AMN SSSR prof. I.N.Ishchenko) i rentgeno-radiologicheskii
otdel (zav. - prof. A.A.Goreletskiy) Instituta eksperimental'noy biologii
i patologii Ministerstva zdoravookhraneniya USSR
(BREAST--CANCER) (OVARICTOMY)

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002064910001-8

the effect of the application of pharmacological on
the general state and motor functions of the gastrointestinal
tract of the dog. H. A. Ziss, Q. O. Bogdanova, Physiol.

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002064910001-8"

ZHOGA, N. A., CHEBOTAREV, K. Ye., KOROL', S. A. and SHUR'YAN, I. M. (Kiev)

"Complex Measures in the Treatment of Radiation Sickness,"

cited experimental data on the good effects of the treatment of radiation sickness with : cytoscopic sera, protein blood replacer BK-8 in combination with vitamin B₁₂, and streptomycin

report presented at the 3rd Conference of Roentgenologists and Radiologists of the Ukr SSR, Kiev, 18-22 June 1956.
Vestnik Rentgenologii i Radiologii, No. 6, Nov.-Dec. 1956, pp. 78-81

ZHOGA, N.A. [Zhoha, N.A.]; KOCHERGA, D.A. [Kocherha, D.O.]

Changes in the picture of peripheral blood and external respiration during acute radiation sickness in dogs. Fiziol. zhur. [Ukr.] 7 no.2:208-213 Mr-Apr '61. (MIRA 14:4)

1. Laboratory of Biophysics and Physiology of Respiration of the A.A.Bogomoletz Institute of Physiology of the Academy of Sciences of the Ukrainian S.S.R., Kiev.
(BLOOD--ANALYSIS AND CHEMISTRY) (RESPIRATION)
(RADIATION SICKNESS)

ZHOGA, V.; KUROV, Yn.

Poultry plant for three million broilers. Sel'. stroi.
no.10:26-27 0 '62, (MIRA 15:11)

1. Rukovoditel' laboratorii ptitsevodcheskikh sooruzheniy
Ukrainskogo gosudarstvennogo proyektного i nauchno-
issledovatel'skogo instituta proyektirovaniya sel'skogo
i sel'skokhozyaystvennogo stroitel'stva (for Zhoga).
2. Glavnyy konstruktor laboratorii ptitsevodcheskikh
sooruzheniy Ukrainskogo gosudarstvennogo proyektного i
nauchno-issledovatel'skogo instituta proyektirovaniya
sel'skogo i sel'skokhozyaystvennogo stroitel'stva (for Kurov).
(Poultry plants)

ZHOGA, V., arkhitektor

Hollow brick wall blocks. Sel'. stroi. 18 no.5:24 My '63.
(MIRA 16:6)

(Bricks)

ZHOGA, V. [Zhoha, V.], inzh.-arkhitektor

New reinforced concrete elements for roofs of poultry buildings.
Bud. mat. i konstr. 4 no.2:38-41 Mr-Ap '62. (MIRA 15:9)
(Precast concrete)
(Poultry houses and equipment)

ZHOGA, V. [Zhoha, V.]

Goose farm with mechanization and automation of the production
processes. Sil'. bud. 11 no.12:16-18 D '61. (MIRA 15:2)

1. Kerivnik laboratorii sporud dlya ptitsi "Ukrndiprosil'gospu."
(Ukraine--Poultry houses and equipment)

PINCHUK, Mariya, zvenevaya; ROZANOVICH, Sasha [Razanovich, Sasna];
ZHOGAL', Matrena [Zhohal', Matruna]

A field crew of close friends. Rab.i sial. 37 no.9:8-9 S '61.
(MIRA 14:10)

(Stolin District--Women as farmers)

ZHOGIN, I.I.

Variant proof of a theorem from the theory of continued fractions.
Usp.mat.nauk 12 no.3:321-322 My-Je '57. (MIRA 10:10)
(Fractions, Continued)

ZHOGIN, V.M., KYUR, R. YA.

Forging

Making forgings on forging machines without loss of metal incidental to clamping.
Avt.trakt.prom., no. 7, 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS, LIBRARY OF CONGRESS, NOVEMBER 1952. UNCLASSIFIED.

ZHOGIN, I.I. (Shadrinsk)

Notes on the theory of functions and number theory. Mat. pros.
no.3:147-155 '58. (MIRA 11:9)
(Functions) (Numbers, Theory of)

ZHOGINA, I.I.

Generalizing the series for the natural logarithm of two. Mat.
pros. no.2:186 '57. (MIRA 11:7)

(Series)

ZHOGIN, I.I. (Shadrinsk)

Averages. Mat. pros. no. 6: 217-226 '61.
(Functions, Continuous)

(MIRA 15:3)

ZHOGIN, I.I. (Shadrinsk); TIMOFEYEV, V.P. (Shadrinsk)

D.I. Mendeleev and the Ural Society of Amateur Naturalists.
Vop. ist. est. i tekhn. no. 12: 176-178 '62. (MIRA 15:4)
(Mendeleev, Dimitrii Ivanovich, 1834-1907)
(Ural Mountains--Nature study--Societies, etc.)

SOV/137-58-10-21369

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 131 (USSR)

AUTHORS: Kaznachey, B. Ya., Zhogina, V. M.

TITLE: Electrolytic Preparation of a Nickel-cobalt Alloy With Given Magnetic Characteristics (Elektroliticheskoye polucheniye splava nikel' - koba'l't s zadannymi magnitnymi kharakteristikami)

PERIODICAL: Tr. Vses. n. -i. in-ta zvukozapisi, 1957, Nr 1, pp 79-90

ABSTRACT: A technique was developed for the preparation of a non-porous, uniformly thick, and structurally homogeneous electrolytic Ni-Co coating with magnetic characteristics (coercive force of 200 - 300 oersted and residual induction of 5000 - 6000 gauss), which would satisfy the demands for magnetic sound recording. The optimum conditions for the process are adduced.

1. Cobalt-nickel alloy coatings--Preparation
2. Cobalt-nickel alloy coatings--Magnetic properties

N. P.

Card 1/1

23600

S/081/61/000/008/008/017
B110/B203

18-1140 also 1087, 1160

AUTHORS: Kaznachey, B. Ya., Zhogina, V. M.

TITLE: Electrodeposition of highly coercive alloys

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 8, 1961, 336, abstract
8K199 (8K199) (Tr. Vses. n.-i. in-ta zvukozapisi, 1959,
vyp. 6, 119-135)

TEXT: The authors indicate the electrolytic compositions as well as the deposition conditions of Co-Ni-P and Co-W alloys. They investigate the effect of composition and conditions of electrolysis on the properties of the alloys. They found that the presence of NH_4 and NaPO_2 in the solution was necessary for making a highly coercive alloy. [Abstracter's note: Complete translation.]

Card 1/1

p.3

808/77-A-2-15/12

23(4) 23 (5)

AUTHOR:

ಪ್ರತಿ:

PERIODICAL:

ABSTRACT:

Lyalkov, I.S.
Successes of Soviet Electrophotography (Uspeshi sovetskoy elektrofotografii) I Scientific and Technical Conference on Questions of Electrophotography (Nauchno-tekhnicheskaya konferentsiya po voprosam elektrofotografii) cheskaya konferentsiya po voprosam elektrofotografii i prikladnoy fotografii (1958)

[illegible]

of the Muzhko-Islandovskii Ministry of Electrophysics,
the Scientific Research Institute, over 300 scientific wor-
kers, attended the Deputy Chairman of the Council
conference, was opened by the Lithuanian SSR Minis-
ter for National Economy, the director of the Institute
for Electrophysics, I. Zhilovich, reviewed the state
and prospects for development of electrophysics in the
USSR. He stated that research in this field should be
carried out along the following lines: a) a search
for new photoactive materials with high dark resistance;
b) development of the theory of the internal photoeffect;
c) development of photosemiconductor devices; d) de-
velopment of the theory of the internal electrophoretic
process. K. S. Lysikov (speaking also for O. G. Popova)
presented a report in which he suggested determining the
light sensitivity of electrophysics, as for I. Zhilovich,
units. M. Z. Plevina (speaking for I. Kalinauskas and O. G.
L. I. Yuryuk, N. N. Markovskii) reported on the results of
Savayzidi) reported on electrophoretic layers, photo-
of a semiconductor on highly sensitive devices, and
Pavlin gave a report on electrophotocopying devices, and
graphic layer formation process of the tonal electro-
photographic image on the basis of the photoemitter.
He also described the design of a relaxation period of
afterglow sensitivity by the laser, and the circuit
for charge on the surface of the layer, and the circuit
of an electrophotographic copying device. Anilov
finished describing the theory and then spoke on the
mechanics and kinetics of the development of the latent
electrophotographic image in liquid developers.

Card 3/10

SOV/77-4-2-15/18

Successes of Soviet Electrophotography: A Scientific and Technical Conference on Questions of Electrophotography

K.M. Vinogradov described some of the features of the cathode and liquid methods of electrophotographic development. A.S. Karpashko devoted his report to the criticism of the light sensitivity of the electrophotographic process. At the reports, a discussion took place on methods of determining the light sensitivity of electrophotographic layers. O.V. Chernyshev spoke on the prospects of developing polymeric processes using electric and magnetic forces. O.V. Chernyshev also for I.I. Zhilovich, A.I. Sukhiy, V.A. Gerderev, A.S. Puzha and Yu. I. Kavalaytis reported on the development of electrophotographic reproducing equipment. A.S. Puzha (speaking also for I.I. Zhilovich, A.S. Rodionovich, M.M. Gal'vitskiy and A.I. Raykavskas) reported on the use of electrophotographic methods in recording oscillographs and other recording instruments.

V.F. Kurchenko (speaking also for I.M. Balin) spoke on the possibility of electrophotographically recording images from electron-beam tubes. L.S. Korol' (speaking also for M.M. Karpovich, I.I. Korlovskaya, B.I. Kuznetsov, A.E. Mayans, I.I. Zhilovich and A.I. Sukhiy) gave a detailed description of laboratory machine methods of producing photosensitive layers. A.I. Zhilovich and V.A. Gerderev also for I.I. Zhilovich and V.A. Gerderev, A.S. Puzha, M.V. Fedotov and T.M. Gerderev reported on a method of examining electrophotographic materials using an a/c bridge. S.I. Khotanovich (speaking also for A.I. Gikens and I.S. Zhilovskas) spoke on developing materials for electrophotography and ferrography, including developed methods of measuring the electrostatic potentials of electrophotographic layers, stressing that the oscillating electrode should not be placed above a layer with varying potential. This causes self-discharge. M.V. Fedorovskiy (speaking also for A.I. Gikens, I.I. Zhilovskas and I.S. Zhilovskas) spoke on the practice of producing samples produced by the electrostatic field, and showed papers in an electrostatic field. The results of the development of electrophotographic methods in which he contributed to the work of the Scientific Research Institute of Electrophotography in Vainys and the Institute of Polymer Chemistry and Technology (Moscow). Debates were then held

Card 6/10

on methods of measuring the potential of charged electro-
photographic layers. Kuznetsov's report to be met always
was shown in G.G. Grentsin's report to be not always
correct. G.G. Grentsin stated that: the bad influence
of the electric field on the electrochromic properties of
the oscillating electrode can be eliminated if the
electrode probe above its surface is fixed and the pick-
up is connected to it by a shielded cable. In the de-
bate on Ye.L. Reinskovskiy's report it was stated that:
the research of Academician A.N. Terenin and his
Pusteko should be considered as the basis of all work
on electrophotographic papers with ZnO, as they were
the first to show the possibility of optical amplifi-
cation of the internal photoeffect in ZnO. Ye. Reins-
kovskiy then gave a report on the depositing of charges
by a corona discharge. A. N. Terenin and I.P.
Fenglin reviewed some of the results of the use of
electrophotographic methods in radiography. I.Y. Krut'ko
(speaking also for I.L. Zhuravichuk, Vladimir Yu.K.
Vishchuk and Yu. G. Grentsin) reported on relaxation pro-
cesses in semiconductor layers, pointing to research on some
mercuric sulfide layers. G. Grentsin reported on research on some
physical properties of the polycrystalline layers of
physically deposited ZnO. M.P. Mikhalovich spoke on some
of the photoelectric properties of Sb₂S₃ and Sb₂Se₃; the
absorption maximum of the latter is about 900 mμ.
S.M. Bayan reported on methods of obtaining selenium
light-sensitive layers, including sublimation and ther-
mal treatment; it was also found that the sensitivity
of the layers increased after storage for 1.5 to 2 months
at room temperature. F.M. Polygalin (speaking also
for G.G. Grentsin) spoke on research into the opti-
cal properties of electrophotographic layers of
amorphous selenium and powdered zinc oxide. Ye.K.
Sulikov (speaking also for A.S. Rykachev) discussed
the production of selenium layers and reports on ferro-
properties. Finally, the lecture by A. A. Kazacheyev,
V. G. Grentsin, I. L. Zhuravichuk, S. A. Kazacheyev,
Ye. Reinskovskiy, and the deposition of ZnO-ZnO-Alloys
on the subject of "Electrodeposition of ZnO-ZnO-Alloys
on the Subject of Magnetic Oscillations" by the ferro-
visualization of Magnetic Oscillations by the ferro-
graphic method: 3) V.G. Petrunov, "Ferrographic Recording
of Facial Images" 4) I. L. Zhuravichuk, I. L. Galka, B.
Ye. Buzhuk, I. I. Maynina, A. A. Kazacheyev, Ye. Reinskovskiy,
on Non-Pneumatic Ferrographic Imaging. There was
also an exhibition showing the work of the Electro-
graphic Institute. The most important conclusion of
the conference was that a solid approach has been made
to the possibility of widening the range of applications
of electrophotography, although the work of the
of electrophotography. It was only in 1951-52 it has covered as much ground
in this field as was possible while admitting that it was
as the USSR produces results already achieved than to be
the first to arrive at them, the conference observed
that the Americans took good care that no important
information appeared in the literature available.

Card 10/10

1

Ca

Preparation of vanadium from slag. M. H. Zapa-
dinski and V. M. Zhurav. *Tekhnika Metal.* 1932, No.
5/6, 68-73. Ratio of V with acids is too low because of
low soly. of slag. Roasting with addn. of 15% of
chalk or lime at 800°C followed by treatment with acid
resulted in 80-90% recovery. Pure iron vanadate was
obtained by adding Fe and neutralizing the soln., but the
ratio V:Fe was too low, and the process can be applied
only to ores with low P content. For high-P ores a
method was developed whereby all the V is sol'd. from Fe
to obtain V_2O_5 . Charge roasted with lime or chalk is
dissolved in HCl; the soln. neutralized with CaO , and the
ppt. treated with ammonia. By this treatment 92-95%
of the V is ext'd. The soln. is then evap'd. to dryness to
obtain V_2O_5 . The ammoniacal solns. are free from P, Al,
Fe, etc., and contain only a small amt. of SiO_2 and traces
of Ca. B. N. Daniloff

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

RECORD #	SEARCHED	INDEXED	SERIALIZED	FILED
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114 Low Imp. Sheets

PROCESSES AND PROPERTIES INDEX

4

ADDITION OF BARIUM AND CALCIUM CHLORIDES IN THE ELEC-

trolysis of fused magnesium chloride. A. Yu. Taits and
V. M. Zhurav. *Leghe Metal*, 6, No. 3, 25 (1967).
The addition of 20% BaCl₂ or CaCl₂ to an electrolyte containing

MgCl₂ 32-41, KCl + NaCl 55-77 and CaF₂ 0% increases
the current efficiency 12%. H. W. Rathmann

ADD-56A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNONYM

SYNONYM

EXPLANATION

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

7

Colocimetric determination of vanadium. M. B. Zapadinskii and V. M. Zhogina. *Prilozhenie Metal. 1932, 513.*—Defects of the colorimetric method proposed by Karamanikov (*Mineral. Sibir. No. 6, 489 (1930)*) and modified by Zulfarmintz and Rozhkova (*C. A. 22, 1558*) by means of NH_4 molybdate and H_2PO_4 are pointed out. Because of the high Mo content in the standard solns. recommended by the above investigators, a yellow color appears even in the absence of V, apparently owing to the formation of a compound of Mo and P. The acid concn. affects the color very greatly, and the necessity of maintaining the acidity within narrow limits is a disadvantage in analyzing solns. of varying acidities. The presence of chlorides, contrary to the statement of the inventors of the process, had no influence on the accuracy of the detn. The changes in the intensity of green and yellow color due to varying V content are not very well adapted for colorimetric comparison. H. N. Daniloff

1ST AND 2ND SHEETS		PROCESSING AND PROPERTIES INDEX	
BC		B I 6	
<p>Preparation of vanadium from slag. M. B. ZAVADINSKY and V. M. FLORENSKY (U.S.S.R.), 1932, No. 4, 68-73. — Heating with 15% of CaCO_3 or CaO, at 850-950° followed by acid treatment, neutralization with CaO, and treatment of the ppt. with NH_3, gave 92-96% recovery. Ch. Ass.</p>			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION			
1ST AND 2ND SHEETS		1ST AND 2ND SHEETS	
1ST AND 2ND SHEETS		1ST AND 2ND SHEETS	

S/081/61/000/024/051/086
B107/B110

AUTHORS: Kaznachey, B. Ya., Zhogina, V. M., Pochtareva, V. I.
TITLE: Effect of the electrolysis conditions on the shape of the hysteresis loop in the electrodeposition of magnetically hard alloys
PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1961, 344 - 345, abstract 24K132 (Tr. Vses. n.-i. in-ta zvukozapisi, no. 8, 1961, 61 - 86)

TEXT: The production conditions of magnetically hard alloys (Co - Ni, Co - Ni - P and Co - W) with a widely varying range of the magnetic properties (coercive force 100 - 80 oe, residual induction up to 6000 gauss) were studied. The orthogonality of the hysteresis loop can be changed by changing the electrolysis conditions (temperature, pH, current density and velocity of rotation of the cathode). It was impossible, however, to obtain deposits with an orthogonality close to 1. The orthogonality of the hysteresis loop of the deposits obtained is reduced under the follow-

Card 1/2

Effect of the electrolysis ...

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B107/B110

ing conditions: For Co - Ni if the solution temperature is above 60°C;
for Co - Ni - P if the current density decreases below 5 a/dm²; further-
more, if pH exceeds 5 and if the solution temperature is below 40°C or
above 60°C; for Co - W if the temperature is below 40°C or above 70°C.
Furthermore, for a pH below 3. [Abstracter's note: Complete translation.] ✓

Card 2/2

24061NA V. 17
 LITATOV, A. V.

PHASE I BOOK EXPLOITATION SOV/2216

5(4)
 Soveshchaniye po elektrokhemii. 4th, Moscow, 1956.

Trudy... [Izbraniye] (Transactions of the Fourth Conference on Electrochemistry; Collection of Articles) Moscow, Izdatel'stvo Khimicheskoy Literatury, 1959. 663 p. Errata slip inserted. 2,500 copies printed. Sponsoring Agency: Akademiya nauk SSSR. Odobreniya Khimicheskikh Nauk.

Editorial Board: A.M. Frumkin (Zast. Zk.) Academician, O.A. Yasin, Professor, S.I. Zhdanov (Resp. Secretary), B.M. Kabanov, Professor, Ye.S. I. Zhdanov (Resp. Secretary), B.M. Kabanov, Professor, Ye.S. I. Zhdanov, Doctor of Chemical Sciences, V.V. Losav, P.D. Yak. M. Kolotyrkin, Doctor of Chemical Sciences, V.V. Stender, Professor, Lukovitsav, Professor, Z. Solov'yeva, V.V. Stender, Professor, and G.M. Florimontskiy, Z. Ed. of Publishing House: M.G. Yagorov; Tsch. Ed.: Z.I. Trunskova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.
 COVERAGE: The book contains 127 of the 139 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer phenomena, galvanic processes in metal electrocatalysis, and electrocatalysis. Abridged discussions are given at the end of each division. The majority of reports not included in this collection were published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

Agalov, B.I. Hydrometallurgical Production of Manganese and Chromium 493

Zitov, P.S. and Z.A. Tshubakina (Institut tsvestnykh metallov i zolota, imeni M.I. Kalinina-Institute of Nonferrous Metals and Gold, imeni M.I. Kalinin). Cathodic Process During the Deposition of Tin From Manganous Electrolytes 498

Zolukarov, M.M. (Permskiy gosudarstvennyy universitet-Perm State University). Hydrogen Absorption by Steel Cathodes in the Metal Electrodeposition Process 502

Zhogina, V.M. and B. Ya. Kuznetsov. Electrodeposition of Rare-Magnetic Alloys 506

Kadanov, I.I. and A. Kh. Pasik (Pedagogicheskii institut Institut sovetskoy tozgovir; Kna.-Kor-Pedagogical Institute of Soviet Trade). Mechanism of Electrolytic Deposition of Metals Onto a Passivated Surface 512

Card 20/34

SOV/137-58-9-19582

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 208 (USSR)

AUTHORS: Kaznachey, B.Ya., Zhogina, V.M.

TITLE: Electrolytic Deposition of Highly Coercive Nickel-cobalt Alloy
(Elektroosazhdeniye vysokokoertsitivnogo splava nikel'-kobal't)

PERIODICAL: Tr. Vses. n.-i. in-ta zvukozapisi, 1957, Nr 1, pp 91-93

ABSTRACT: The effect of the conditions of electrolysis on the properties of coatings of an Ni-Co alloy with $H_c = 500-800$ oersted and a residual induction of 4000-5000 gauss was investigated and a technique for producing them was developed. The electrolytic deposition of the alloys was conducted in a solution of the following composition: (in g/l) : $NiCl_2 \cdot 6H_2O$ 120, $CoCl_2 \cdot 6H_2O$ 120, NH_4Cl 100, NaH_2PO_2 9. Upon the increase of the cathode cd from 1 to 20 amp/dm², H_c of the deposit increases. Optimum results are obtained at a cathode cd of 10-15 amp/dm². Upon an increase of the temperature of the electrolysis from 20 to 90°C the magnetic properties of the alloy pass through a maximum at 40-60°. At pH=1.0-4.5 the alloy deposited has strong magnetic properties; at pH > 5 H_c of the alloy decreases.

Card 1/2

SOV/137-58-9-19582

Electrolytic Deposition of Highly Coercive Nickel-cobalt Alloy

Upon an increase in the concentration of NaH_2PO_2 H_c increases to maximum values of 600-700 oersted and then, beginning with 13 g/l, it decreases. In a pilot-plant bath Ni-Co alloy was deposited on a drum during its rotation and in the presence of screens. The density of the recording and the amplitude of the outgoing signal of the Ni-Co alloy #2 obtained are equal in value to the powder coating 101, whereas it surpasses it in mechanical properties.
N.K.

1. Cobalt-nickel alloys---Electrodeposition 2. Electrolytes--Properties 3. Electrolysis
--Effectiveness

Card 2/2

METALLURGICAL LITERATURE CLASSIFICATION																									
IRON GROUP													NON-IRON GROUP												
IRON GROUP													NON-IRON GROUP												
<p>Artificial wax. T. B. Zhogishev. Russ. 40,649, April 30, 1930. A mixt. of melted ceresin and rosin is slightly agitated, and heated under pressure at a temp. not over 110°.</p>																									

GRIBOV, L.A.; ZHOGINA, V.V.

Use of electronic computers in solving problems involving
oscillations of polyatomic molecules. Opt. i spektr. 17
no.6:832-837 D '64. (MIRA 18:3)

KHODAKOVSKIY, I.I.; ZHOGINA, V.V.; RYZHENKO, B.N.

Dissociation constants of hydrosulfuric acid at elevated temperatures. Geokhimiya no.7:827-833 JI '65.

(MIRA 18:11)

1. Institut geokhimi i analiticheskoy khimii imeni V.I. Vernadskogo AN SSSR, Moskva. Submitted February 20, 1965.

GUSYAKOV, V.P. [Huziakov, V.P.]; ZHOGLO, F.A. [Zholo, F.A.]

Preparation and properties of ethyl ester of oleic acid. Farmatsev.
zhur. 17 no.3:23-34 '62. (MIRA 17:10)

1. Kafedra obshchey khimii L'vovskogo meditsinskogo instituta.

79-28-5-35/69

AUTHORS: Baranov, S. N., Zhoglo, F. A., Vizgert, R. V.

TITLE: ~~Synthesis of Some Esters of the 4,4'-Dioxydiphenylsulfone~~
and of Carboxylic Acids (Sintez nekotorykh slozhnykh efirov
4,4'-dioksidifenilsul'fona i karbonovykh kislot)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 5,
pp. 1274 - 1276 (USSR)

ABSTRACT: The authors aimed at synthesizing the full esters of the
4,4'-dioxydiphenylsulfone and of some carboxylic acids of
the aliphatic, aromatic and heterocyclic series. In refer-
ences there are remarks concerning the synthesis of the
esters of 4,4'-dioxydiphenylsulfone by its condensation with
acids in the presence of phosphoroxchloride (Reference 3).
The same method was used here. The products necessary for
the synthesis were taken 'ready made' or according to the me-
thods described in references. The purity was checked accord-
ing to chemical constants and in some cases also ana-
lytically. For the synthesis of the esters the dry dioxyd-
iphenylsulfone was carefully crushed with the acid (1 part

Card 1/3

79-28-5-35/69

Synthesis of Some/Complex Esters of the 4,4'-Dioxydiphenylsulfone and of Carboxylic Acids

sulfone: 2 parts acid), the mixture was heated in the flask to 120 - 140°C and into this the calculated amount of phosphorochloride was added in drops. The whole was heated to the complete removal of hydrogen chloride, then cooled and treated with 5% soda solution; the organic and inorganic acids, as well as the above-mentioned sulfone which did not enter reaction, were removed. The final product, the ester, was recrystallized. Furthermore the ester of the α -bromoisovalerianic acid and of the dioxydiphenylsulfone were obtained on heating the bromoanhydride of the same acid with the sodium salt of the dioxydiphenylsulfone. All synthesized esters are white or light-yellow powdery products; they are difficult to dissolve in water and easily soluble in alcohol, acetone and dioxane. They hydrolyze on heating with 10% alkali solution. The properties of the 14 synthesized esters are mentioned in a table. There are 1 table and 4 references,

Card 2/3

79-28-5-35/69

Synthesis of Some ^{Complex} Esters of the 4,4'-Dioxydiphenylsulfone and of
Carboxylic Acids

1 of which is Soviet.

ASSOCIATION: L'vovskiy meditsinskiy institut (L'vov Medical Institute)

SUBMITTED: March 27, 1957

Card 3/3

ZHOGLO, O.I., podpolkovnik med.sluzhby

Mass anthelmintic treatment with piperazine adipate in ascariasis
and trichocephaliasis. Voen.-med.zhur. no.10:91-92 0 '61.
(MIRA 15:5)

(ASCARID3 AND ASCARIASIS) (TRICHOCEPHALIASIS,
(PIPERAZINE)

ZHOGLO, O. I. (Lieutenant Colonel of the Medical Service)

"Experience in Mass Dehelminthization with Piperazine Adipate for Ascariasis and
Trichocephaliasis"

Voyenno-Meditsinskiy Zhurnal, No. 10, October 1961

L 22905-66 EWT(d)/EWT(1)/EPF(n)-2 IJP(c) WW/GG
 ACC NR: AF6006865 SOURCE CODE: UR/0181/66/008/002/0601/0602
 AUTHOR: Dolgoplov, D. G.; Zhogolev, D. A.
 ORG: Physicotechnical Institute of Low Temperatures, AN UkrSSR, Khar'kov (Fiziko-
tekhnicheskiy institut nizkikh temperatur AN UkrSSR)
 TITLE: Temperature dependence of the moments of EPR lines
 SOURCE: Fizika tverdogo tela, v. 8, no. 2, 1966, 601-602
 TOPIC TAGS: epr, epr spectrum, temperature dependence, dipole interaction, elec-
 tron spin, crystal lattice, line broadening, resonance line, nuclear magnetic res-
 onance
 ABSTRACT: The authors present formulas for the moments of the principal resonance
 line, relative to the Larmor frequency ω_0 , which are valid in a wider temperature
 range than previously published. The formulas are limited to the case of dipole
 interaction of identical spins in a rigid lattice. Formulas for the temperature
 dependence of the moments are also given. At high temperatures ($\alpha \ll 1$, where
 $\alpha = \gamma \hbar H_0 / kT$, other symbols standard) the first moment is linear in α in first ap-
 proximation, and the second moment coincides in zeroth order in α with the expres-
 sion given by Van Vleck (Phys. Rev. v. 74, 1168, 1948). The results show that the

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L 22905-66

ACC NR: AP6006865

dipole interaction of the spins brings about not only broadening, but a shift of the resonance line, which decreases with increasing temperature and is linear in α at high temperatures, approaching a certain finite value at low temperatures. The width of the resonance line increases exponentially at low temperatures and reaches saturation at high temperatures. It is noted in conclusion that the first moment differs noticeably from zero in anisotropic crystals or very thin films. The temperatures at which these effects come into play are determined by the condition $\alpha \approx 1$, and are 10K for EPR and ≈ 0.01 K for NMR. Orig. art. has: 4 formulae.

SUB CODE: 20/

SUBM DATE: 21May65/

ORIG REF: 001/

OTH REF: 002

Card 2/2 BLC

ZHOGLOV, I.

Promote the modernization of equipment. HTO 2 no.2:35 P '60.
(MIRA 13:5)

1. Brigadir skorostnoy prokhozheskoy brigady Achisayskogo
rudnika.
(Achisay--Mining engineering--Technological innovations)

ZHOGOL', L.Ye., nauchnyy sotrudnik

Wider range and better quality of upholstery fabrics. Tekst.prom.
18 no.10:12-14 0 '58. (MIRA 11:11)

1. Akademiya stroitel'stva i arkhitektury.
(Textile fabrics) (Upholstery)

ZHOGOL', L. Ye., nauchnyy sotrudnik

New decorative fabrics. Tekst. prom. 23 no. 3:9-12 Mr '63.
(MIRA 16:4)

1. Akademiya stroitel'stva i arkhitektury UkrSSR.

(Textile fabrics) (Interior decoration)

ZHOGOLEV, A.

Accounting

Limiting the expenditure of materials in production, Bukhg. uchët No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

ZHOGOLEV, A.L.

Experiment in finish sawing the Kremenchug Woodworking Combine.
Der.prom. 10 no.5:21-23 My '61. (MIRA 14:5)
(Kremenchug---Woodworking industries) (Saws)

ZHOGOLIV, A.L., inzh.

Automatic mixing units for the manufacture of wood fiber boards.
Der. prom. 8 no.8:10-12 Ag '59. (MIRA 12:12)

1. Kremenchugskiy derevoobrabatyvayushchiy kombinat.
(Wood, Compressed)

ACC NR: AP7005750

SOURCE CODE: UR/0126/67/023/001/0023/0027

AUTHOR: Dolgoplov, D. G.; Zhogolev, D. A.

ORG: Physico-Technical Institute of Low Temperatures, AN UkrSSR (Fiziko-Tekhnicheskii institut nizkikh temperatur AN UkrSSR)

TITLE: Isotopic differences in the Knight shift

SOURCE: Fizika metallov i metallovedeniye, v. 23, no. 1, 1967, 23-27

TOPIC TAGS: The difference in Knight shifts for two isotopes of the same metal is estimated as a function of the following factors: a) difference in lattice constants; b) electron-phonon interaction; c) difference in magnetic moments of the nuclei. The change in the Knight shift due to changes in the lattice constant is determined from the premise that the Knight shift is roughly proportional to the paramagnetic susceptibility of electron gas. The effect of electron-phonon interaction is considered with the aid of methods of the quantum field theory. And the effect of differing magnetic moments of the nuclei of the isotopes is considered from the standpoint of their influence on the magnetic interaction between the electron and the nucleus. It is shown that the relative differences in the lattice constants and nuclear magnetic moments of the isotopes are extremely small. As for the effect of electron-phonon interaction on the

Card - 1/2

UDC: 539.292:538.01

ACC NR: AP7005750

relative Knight shift k , the available experimental and theoretical findings show that for rubidium (isotopes Rb^{85} and Rb^{87}) $k^{85}/k^{87} - 1 = 0.38 \pm 0.03\%$, i.e. Δk is negative; for the lithium isotopes Li^6 and Li^7 we have $k^6/k^7 - 1$, i.e. again $\Delta k < 0$. The observed negativeness of Δk gives reason to believe that the experimentally recorded isotopic differences in the Knight shift for two isotopes of the same metal are chiefly conditioned by phonon-electron interaction. "The authors are indebted to I. O. Kulik for his interest in and valuable discussion of this project." Orig. art. has: 11 formulas.

SUB CODE: 07, 20 SUBM DATE: 11May66/ ORIG REF: 006/ OTH REF: 006

Card 2/2

ZHOGOLEV, D.T.

Studying bloodsucking dipterans of Transcarpathia by the use of
light traps. Nauk. zap. UzhGU 40:151-159 '59. (MIRA 14:4)

1. Kafedra Obshchey biologii i parazitologii imeni akademika Ye.N.
Pavlovskogo Voenno-meditsinskoy akademii imeni S.M.Kirova.
(Transcarpathia--Diptera) (Insect traps)

ZHOGOLEV, D. T. Cand Med Sci -- "Methods of collect^{ing}~~ion~~ and ^{calculating}~~registration~~
of the number^f of sanguinivorous dipterous insects in the practice of sanitary-
~~hygienic~~ -epidemiological ^{examination}~~inspection~~." Len, 1961 (Min of Health RSFSR. Len
Sanitary-Hygienic Med Inst). (KL, 4-61, 208)

-344-

ZHOGOLEV, D.T.

Light traps for the collection and study of insects acting as carriers of disease. Ent. oboz. 38 no.4:766-773 '59 (MIRA 13:3)

1. Voenno-meditsinskaya ordena Lenina Akademiya im. S.M. Kirova, kafedra biologii s parazitologiyey im. akad. Ye. N. Pavlovskogo, Leningrad.

(Diptera) (Insect traps)

ZHOGOLEV, D.T., mayor meditsinskoy sluzhby

Light trap for insects. Voen.-med. zhur. no.7:88 J1 '61.

(MIRA 15:1)

(INSECT TRAPS)

ZHOGOLEV, D.T., kand. med. nauk

Abundance of mosquitoes in some regions of the Crimean peninsula.

Voen.-med.zhur. no.9:47-49 '64.

(MIRA 18:5)

ZHOGOLEV, D.T.

Effect of the bleed of Vipera lebetina L. on ticks of the genus
Ornithodorus. Zool. zhur. 44 no.9:1422-1423 '65.

(MIRA 18:10)

1. Kafedra obshchey biologii s parazitologiyey Voenno-meditsinskoy
akademii imeni S.M. Kirova, Leningrad.

ZHOGOLEV, I.

Valuable suggestions. Mast. ugl. 7 no.11:19-20 N '58.

(MIRA 11:12)

(Coal mines and r (ng---Equipment and supplies)

ZHOOGOLEV, I. M.

"Investigation of the Optimum Conditions of Loading of the DT-54 and ASKIZ-MATI Tractors on Virgin Soil and Old Arable Lands of Altayskiy Kray."
Cand Tech Sci, Chelyabinsk Inst of Mechanization and Electrification of Agriculture,
Min Higher Education USSR, Chelyabinsk, 1955. (KL, No 10, Mar 55)

/ So: Sum. No 670, 29 Sept 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (15)

ZHOGOLEV, I.M.

Fallow plowing and fall plowing at higher speeds on new and idle
lands. Sel'khozmaschina no.2:5-8 P'55. (MLRA 8:3)
(Plowing)

ZHOGOLEV, I.N.

Experience in the automatization and mechanization of mining operations
in Kuznetsk Basin mines. Ugol' 36 no.1:49-50 Ja '61. (MIRA 14:11)

1. Dom tekhniki tresta Kuybyshovugol'.
(Kuznetsk Basin--Coal mining machinery)
(Automatic control)

ZHQGOLEV, L. P.

Monogram for calculating the vector of residual magnetization.
Razved. 1 okh. nedr 28 no.6:52-53 Je '62.

(MIRA 15:10)

1. Kazakhskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta razvedochnoy geofiziki.

(Rocks—Magnetic properties)

ZHOGOLEV, L. P.
ZHOGOLEV, L.P.

Determining the depth of magnetized bodies by magnetic potential
higher derivatives. Vest. LGU 12 no.2:48-59 '57. (MIRA 11:2)
(Prospecting--Geophysical methods)
(Magnetism, Terrestrial)

ZHOGOLEV, L.P.

Square-lined transparent sheets for determining the elements of magnetized bodies by means of the highest derivatives of the magnetic potential. Uch. zap. IGU no. 249:237-242 '58. (MIRA 11:5)
(Magnetism, Terrestrial) (Prospecting—Geophysical methods)

SMELOV, A.A.; ZHOGOLEV, L.P.; Khabibullina, R.I.

Natural residual magnetism of rocks. Uch.zap.IAU no.303:245-
266 '62. (MIRA 15:11)
(Kazakhstan--Rocks--Magnetic properties)

ZHOGOLEV, I.P.; SMELOV, A.A.; KHABIBULLINA, R.I.

Use of mathematical statistics in studying the physical properties
of rocks. Vop. razved. geofiz. no.3:164-180 '64.

(MIRA 18:2)

ZHOLOV, L.P.; MIRONOV, V.S.

Large-scale gravity and magnetic surveys for geological mapping
in the Rudnyy Altai. Uch. zap. IGU no.278:66-8? '59.
(Altai Mountains--Prospecting--Geophysical methods)
(MIRA 13:2)

BARINOV, Ye.A.; ZHOGOLEV, L.P.

Equipment for measuring the residual magnetization of rock
samples. Trudy VITR no.3:268-275 '61. (MIRA 15:7)
(Magnetic prospecting)

S/169/62/000/008/002/090
E202/E192

AUTHORS: Barinov, Ye.A., and Zhogolev, L.P.
TITLE: Instrument for measuring residual magnetisation of
rock samples

PERIODICAL: Referativnyy zhurnal, Geofizika, no.8, 1962, 9,
abstract 8 A 42. (Tr. Vses. n.-i. in-ta metodiki i
tekh. razvedki, no.3, 1961, 268-275)

TEXT: An instrument for measuring residual magnetisation of
samples in irregular forms is described. It comprises a magnetic
system suspended on vertical tungsten filament and placed within
the Helmholtz coil which serves as a compensator of the horizontal
component of the Earth field. The instrument contains an optical
metering system and the control desk. The working principle is
identical with that used in operating the astatic magnetometer of
B.M. Yanovskiy and B.T. Chernysheva. The sensitivity of the
instrument is 2×10^{-6} CGSM. The calculation of error due to the
shift of the magnetic centre of the sample is given.

Card 1/2

Instrument for measuring residual... S/169/62/000/008/002/090
E202/E192

The instrument is designated for work in middle latitudes, where there are small variations of horizontal component of the geomagnetic field, since this instrument is sensitive to heterogeneities in magnetic fields and variations in declination. ✓

[Abstractor's note: Complete translation.]

Card 2/2

YEFIMOV, V.F., inzh.; IVANOV, A.A., inzh.; LEYTIN, G.S., inzh.; PAVLOVA, Ye.S., inzh.; TSALIT, O.N., inzh.; ZHOGOLEV, V.S., inzh.

[Road and building machinery and mechanized building tools; catalog-reference book] Stroitel'nye i dorozhnye mashiny i mekhanizirovannyy stroitel'nyi instrument; katalog-spravochnik. Moskva, TSentr.biuro tekhn.informatsii Vniistroidormasha, 1958. 471 p. (MIRA 13:3)

1. Russia (1917- R.S.F.S.R.) Gosudarstvennaya planovaya komissiya Rosglavyazhmashnabsbyt. 2. TSentral'noye byuro tekhnicheskoy informatsii Vsesoyuznogo nauchno-issledovatel'skogo instituta stroitel'nogo i dorozhnogo mashinostroyeniya (TsBTI VNIISTroydormash)(for all).

(Building machinery)

(Road machinery)

ZHOGOLEV, YE. A.

"Experience of Working With the M-2 Machine Employing Automatic Scale Adjustment" a paper presented at the Conference on Methods of Development of Soviet Mathematical Machine-Building and Instrument-Building, 12-17 March 1956.

Translation No. 596, 8 Oct 56

16(1); 28(2)

PHASE I BOOK EXPLOITATION

507/2291

Zhogolev, Yevgeniy Andreyevich, Gennadiy Stepanovich Koslyakov, Nikolay Pavlovich Trifonov, and Mikhail Romanovich Shura-Bura, Professor

Sistema standartnykh podprogramm (System of Standard Subroutines) Moscow, Mzmatgiz, 1958. 230 p. (Series: Biblioteka prikladnogo analiza i vychislitel'noy matematiki) 8,000 copies printed.

Sponsoring Agency: Moskovskiy gosudarstvennyy universitet. Kafedra vychislitel'noy matematiki.

Ed. (Title page): Mikhail Romanovich Shura-Bura, Professor; Ed. (Inside book): Yu. M. Bezborodov; Tech. Ed.: S. N. Akhlanov.

PURPOSE: This book is intended for persons working in the field of computer mathematics as well as students specializing in this field and others interested in the problems of performing operations on high speed digital computers.

COVERAGE: The book is basically a description of a system of standard

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System of Standard Subroutines

SOV/2291

subroutines which were applied at the Vychislitel'nyy tsentr (Computing Center) of Moscow State University in 1955-1956. The book consists of an introduction and two parts. In the introduction, principles of construction and operation of high speed digital computers and basic programming concepts and methods are discussed. In the first part is described the M-2 computer, located in the Laboratoriya upravlyayushchikh mashin i sistem (Control Machine and Systems Laboratory) of the Academy of Sciences, USSR, and built under the supervision of I. S. Bruk, Corresponding Member of the Academy. The peculiarities of programming and selecting a system of standard subroutines for this machine are discussed. In the second part of the book are found certain subroutines from the library suitable for the system selected. Although the subroutines have been selected with a specific machine in mind, the system as well as the algorithms can be completely and successfully applied to various automatic digital computers. These subroutines as well as the contents of the book were discussed at sessions of a seminar in which Academician S. L. Sobolev, Professor K. A. Semendyayev, and Docent I. S. Berezin took part together with coworkers of the Computer Center. The authors thank the latter for their valuable remarks, and also thank V. M. Vasil'yov and E. M. Yershova, both of the Computing Center at Moscow State University, for composing with

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System of Standard Subroutines

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the authors the programs included in Chapter VII. They also thank Yu. M. Bezborodov for editing the book. There are 4 references: 2 Soviet and 2 English.

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System of Standard Subroutines

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AVAILABLE: Library of Congress

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11-10-59

YE. A. ZHOGOLEV

16(1), 16(2)

LEGIONS:

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10V/42-1A-1-27/27

For Publications on Applied Analysis and Numerical Mathematics
(Serwco izdawnictwa po przykladnomu analizn i vychislitel'noy
matematike)

PERIODICA

PERIODICAL: Voprosy matematicheskikh nauk, 1959, Vol. 14, Nr. 1, pp. 261-265 (USSR)

[illegible][illegible]

teorii matematicheskikh maslin¹⁾ with contributions of Ia. Ya. Basilevsky, I. Ya. Akhshakiy, Yu. A. Zhuravly, M. A. Glusberg, I. N. Glusberg, M. M. Masyev, V. S. Linsky, M. A. Loskar'kiy.

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676-97-26-10000
95

41194

S/194/62/000/007/006/160
D222/D309

9.7100

AUTHOR: Zhogolev, Ye.A.

TITLE: A programming system using a library of subroutines

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1962, abstract 7-1-20 n (In collection: Sistema avtomatiz. programmirovaniya, M., Fizmatgiz, 1961, 15 - 52)

TEXT: A standard assembly program, ССН -2 (SSP-2) for the Стрела (Strela) computer, written at the Vychislatel'nyy tsentr, MGU (Computer Center, MGU) is described. This program is used for the input of separate blocks with automatic allocation of storage and corresponding processing. Input of each block can take place from cards, magnetic tape, or by an interchange between storage units. SSP-2 consists of two parts which are input in succession. The first half is a program for the automatic allocation of storage, and the second is the assembly program proper. SSP-2 is called in by two instructions. The place of each block in storage is determined by a

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A programming system using a ...

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table of storage allocation which is assembled either manually, or automatically by SSP-2 from the corresponding information. The algorithm for the automatic formulation of this table is given. SSP-2 imposes some requirements on the standard blocks. Each block must start at a definite address. The internal addresses are processed by the CN 60 (SP60) standard program of the Strela. The external addresses are processed by means of tables of external addresses, attached to each block. The convenience of using standard subroutines depends on the method of allocating these in storage and the method for calling them in. The allocation of subroutines in storage is done by SSP-2. Calling in a subroutine requires that some information that is necessary for its operation must be specified, and then control is transferred to the subroutine. A method of calling is described in which each subroutine is appended with a certain forming part which is partially independent of the contents of the subroutine. A special subroutine, 77, is described which is used in the Strela computer for the simplification of the forming parts of subroutines. [Abstracter's note: Complete translation.] X

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D222/D309

AUTHOR: Zhogolev, Ye. A.

TITLE: Block for the ordering of operators and the assignment of addresses

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1962, abstract 7-1-15 shch (In collection: Sistem avtomatiz. programmirovaniya, M., Fizmatgiz, 1961, 143 - 145)

TEXT: The program described is a part of the programming program written at the Vychislitel'nyy tsentr MGU (Computer Center, MGU) for the Strela computer. The program is intended for: the ordering of the operators in a sequence indicated in the logical scheme; the allocation of working cells in storage; the economization and allocation of constants; the conversion of symbolic addresses into internal and external addresses, and for the output, on punched cards with simultaneous checking, of the abbreviated logical scheme and of the object program in the form of a standard block using the standard program СП 60 (SP 60). There are provisions for process-Card 1/2

✓B

Block for the ordering of operators ... S/194/62/000/007/002/160
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ing the program block for standard components by the program CMM-2 ✓
(SSP-2) without putting the block onto punched cards initially.
[Abstracter's note: Complete translation].

Card 2/2

ZHOGOLEV, Ye.A. (Moskva)

Command system and interpreting system in the machine "Setun".
Zhur. vych. mat. i mat. fiz. 1 no.3:499-512 My-Je '61. (MIRA 14:8)
(Electronic digital computers)

TRIFONOV, N.P., red.; ROSLYAKOV, G.S., red.; ZHOGOLEV, Ye.A., red.;
GOL'DENBERG, G.S., red.; YERMAKOV, M.S., tekhn. red.

[Computing techniques and programming; collection of works
of the Moscow University Computer Center] Vychislitel'nye meto-
dy i programmirovaniye; sbornik rabot Vychislitel'nogo tsen-
tra Moskovskogo universiteta. Moskva, Izd-vo Mosk. univ.
Vol.1. 1962. 349 p.

(MIRA 25:10)

(Electronic calculating machines)
(Programming (Electronic computers))

ZHOGOLEV, Ye.A.; TRIFONOV, N.P.; SHAKHSUVAROV, D.N.

Calculation of electromagnetic fields in lamellar media. Vych.
met. i prog. 1:209-233 '62. (MIRA 15:8)
(Field theory) (Electromagnetic waves)
(Electronic calculating machines)

L 19431-63 EWT(d)/FCC(w)/BDS AFFTC/IJP(C) Pg-4

ACCESSION NR: AR3005384

S/0044/63/000/006/V001/V002

SOURCE: RZh. Matematika, Abs. 6V2

AUTHOR: Zhogolev, Ye. A.

TITLE: A program for integrating systems of ordinary second-order differential equations by the Stermer method

CITED SOURCE: Sb. rabot Vychisl. tsentra Mosk. un-ta, v. 1, 1962, 293-305

TOPIC TAGS: numerical method, second-order differential equation, Stermer method, Runge-Kutta method

TRANSLATION: The program is intended for integrating the system:

$$\frac{d^2 y}{dx^2} = f(x, y) \quad (1)$$

with the initial conditions

$$y|_{x=x_0} = y_0, \quad \frac{dy}{dx}|_{x=x_0} = u_0 \quad (2)$$

according to the extrapolation

$$y_{k+1}^{(0)} = y_k + \nabla y_k + 12 \nabla^2 y_k + \nabla^3 y_k + \nabla^4 y_k + \dots + \frac{19}{20} \nabla^5 y_k + \dots \quad (3)$$

and interpolation

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$$y_{k+1}^{(1)} = [y_k + \nabla y_k + \frac{1}{2!} \nabla^2 y_k + \frac{1}{3!} \nabla^3 y_k - \frac{1}{20} \nabla^4 y_k + \dots] \quad (4)$$

formulas of Stermer with automatic interval selection, taking into account only those terms in these formulas which appear in square brackets. As a measure of accuracy in the determination of the n-dimensional vector we take the quantity

$$M^*(y, \Delta y, q) = \max \delta^*(y_i, \Delta y_i, q), \quad m > 0, \\ s > 0, \quad m+s < n, \quad m < l < m+s,$$

where Δy_i is the absolute error in y_i .

$$\delta^*(y_i, \Delta y_i, q) = |\Delta y_i| \cdot 2^{-\max(\text{ord } y_i - q, 0)}.$$

q is an order of specified accuracy ε of integration in each interval, determined from the equation $\varepsilon = E \cdot 2^q$. At each integration interval, the vectors $y_{k+1}^{(0)}$ are computed from formula (3) and $y_{k+1}^{(1)}$ from formula (4). Upon fulfillment of the equation

$$M^*(y_{k+1}^{(1)}, y_{k+1}^{(0)} - y_{k+1}^{(0)}, q) < E \cdot 2^q - \varepsilon$$

it is assumed that the integration interval has been chosen with sufficient accuracy. The non-fulfillment of this inequality means that the extrapolation formula (3) does not provide the required accuracy, so that an additional analysis of the accuracy of the solution obtained with interpolation formula (4) is carried out. The latter assures the required accuracy of integration upon fulfillment of the inequalities

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$$M^* [y_{k+1}^{(1)}, y_{k+1}^{(1)} - y_{k+1}^{(0)}, q] < 20\epsilon$$

$$M^* [y_{k+1}^{(2)}, y_{k+1}^{(2)} - y_{k+1}^{(1)}, q] < \epsilon.$$

In case of non-fulfillment of one of these inequalities, the size of the integration interval h is halved and the basic vectors are recomputed according to formulas (3), (4). The Runge-Kutta method is employed for the first four integration steps. The author gives a detailed description of the algorithm for solving problem (1), (2) with the aid of formulas (3), (4) and the logical scheme of the program for its realization. To use this program it is necessary to construct two of its non-standard parts for each concrete problem, the first of which is intended for the computation of the vector f , and the second for the processing of results following the fulfillment of each successive step of integration. The suggested program occupies 259 memory cells during operation, not counting the indicated non-standard parts, where $10n + 3$ working cells are used. P. Bondarenko.

DATE ACQ: 24Jul63

SUB CODE: MM

ENCL: 00

Card 3/3

S/794/62/000/001/010/010

AUTHOR: Zhegolev, Ye. A.

TITLE: Program for the integration of systems of ordinary differential equations of the second order by the Runge-Kutta method.

SYNOPSIS:

N. P. Trifonov, G. S. Rozhnova, and Ye. A. Zhegolev. Moscow, 1962, 100 p.

TEXT: The program is written in the Fortran language for the BESM-6 computer.

471/481 $x = x_0$ by the Runge-Kutta method. The algorithm employed in the computation is described, and the logical scheme is set forth. There are 3 references (1 Russian-language Soviet and 2 English-language: Gill, S. A process for the step-by-step integration of the differential equations in an automatic digital computing machine. Cambridge Phil. Soc. Proc., v.47, no.1, 1951, and Collatz, L. Numerical methods for the solution of differential equations, in Russian translation, Moscow, 1958, Card 1/1

VOLKONSKAYA, T.G.; ZHEMCHUZHNIKOVA, D.M.; ZHOGOLEV, Ye.A.; KOTIK, I.P.

Programs for calculating Bessel's functions. Vych. met. i prog.
1:316-323 '62. (MIRA 15:8)

(Bessel's functions)

ZHOGOLEV, Ye. A.

Note on the language ALGOL-60. Zhur. vych. mat. i mat. fiz. 2
no.5:952-953 S-0 '62. (MIRA 16:1)

(Programming languages(Electronic computers))